Prepared by: Centers of Excellence for Labor Market Research, LA/Orange Region, and Inland Empire/Desert Region

March 2016

FACILITIES MANAGERS

> EMPLOYER NEEDS ASSESSMENT

Los Angeles, Orange, Riverside, and San Bernardino Counties

Energy Construction & Utilities

California Community Colleges Workforce & Economic Development



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A portion of the funding was through the enhancement funds and Doing What Matters initiatives.

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■ Executive Summary

To analyze the regional need for facilities managers, the Centers of Excellence conducted a survey of over 100 employers in Los Angeles, Orange, Riverside, and San Bernardino counties.

The study collected information from employers regarding current and projected employment, hiring needs, education and credentialing preferences, and most in-demand skills and technological proficiencies.

Nearly 24,000 facilities managers are currently employed in the four-county region. The far majority, about 22,100, are full time. Only 1,800 are part time.

Regionally, employment growth over the next year will be robust for facilities managers. Employers expect to hire an additional 3,200 facilities managers over the next 12 months, a 14% growth rate.

Those surveyed said the most preferred option for filling facilities manager vacancies is training workers from within the organization, followed by online job advertisements.

The study also took a close look at the firms that employ facilities managers. The majority of firms are in the educational services, health care and social assistance, and accommodation and food services industries. The majority also manage more than one site, and in Riverside and San Bernardino counties, most facilities managers oversee worksites greater than 20,000 square feet.

Additional Key Findings:

- Hiring: Facilities manager employment over the next year is expected to remain level, with 97% of employers expecting to have the same number of employees. One-third expect to have more employees.
- Filling Positions: Only 5% of companies report using a third-party placement agency for hiring facilities managers. Many firms report hiring from within their organization.
- Staff Size: 69% of firms employ 1-3 facilities managers.
- Education: Some postsecondary education combined with work experience is preferred by most employers.
- Certification: Leadership in Energy and Environmental Design (LEED) certification was the most requested industry certification for employers seeking facilities managers in the region.
- In-Demand Skills: Top skills requested by employers were mathematical skills, ability to create solutions for better efficiency and technical problem solving.



■ Introduction

In an effort to better understand employer needs for workers who manage building operations, a survey of relevant firms was conducted in Los Angeles, Orange, Riverside, and San Bernardino counties from December 2015 to February 2016. Potential survey respondents were selected through a process that identified industries with businesses that require a "facilities manager."

This report includes survey findings for the combined four counties. The survey received responses from 116 employers in the four-county geography: 46 employers from Los Angeles County, 31 from Orange, 19 from Riverside and 20 from San Bernardino.

Definition:

Facilities managers provide a range of functions and operational support services to conduct the following: space management, information and communications technology infrastructure, utilities and energy-efficient systems integration, building maintenance, as well as administrative services, contract and vendor management, emergency preparedness, and compliance with safety, health and environmental standards and regulations.

Exhibit 1 – Percent of employer responses by county (n=116)

39% Los Angeles **27%** Orange 16% Riverside

19% San Bernardino

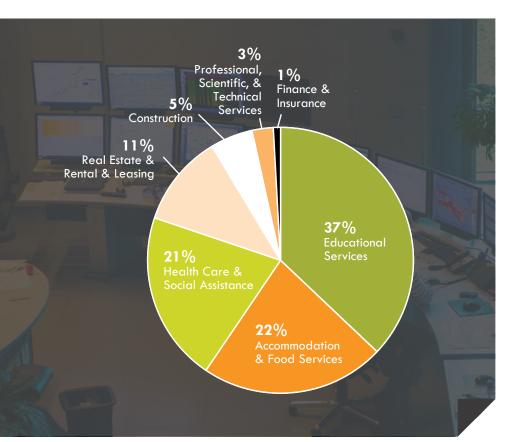


Exhibit 2 – Industry representation

Employers who responded to the survey represented seven industry sectors. See Exhibit 2 below. Educational services firms represented 37% of all respondents, followed by health care and social assistance, and accommodation and food services industries. Combined, respondents from these three industries account for 80% of all responses (91 employers).

...one-fourth of respondents manage between one and three sites, 50% manage 10 or fewer, and 75% mange 26 or fewer

The survey asked respondents if they managed multiple sites, and 59% of companies reported that they do. Businesses who do manage multiple sites were asked how many they manage. Responses varied from one to 72 sites. Exhibit 3 provides a breakdown of the businesses and the number of sites they manage. Because of the high variation in the number of managed sites reported, it helps to view the distribution in four equal groups.

Exhibit 3 – Number of sites managed

Number of Managed Sites	% of respondents	Cumulative % of respondents
1–3	25%	25%
4–10	25%	50%
11–26	25%	75%
27–72	25%	100%

As Exhibit 3 demonstrates, one-fourth of respondents manage between one and three sites, 50% manage 10 or fewer, and 75% mange 26 or fewer. This suggests that while there are certainly companies that manage a large number of sites, most manage fewer than 27 sites.

Businesses also were asked to indicate the size of the buildings, by square footage, they manage in each county. In Los Angeles County most respondents (68%) reported managing buildings of 20,000 square feet or less. In Orange, Riverside and San Bernardino counties responses tended toward the larger square footage categories. The majority of respondents in these counties reported managing buildings of 20,001 square feet or more.

Exhibit 4 – Size of locations managed, by county

Square footage	Los Angeles (n=46)	Orange (n=31)	Riverside (n=19)	San Bernardino (n=20)
None	0%	0%	5%	5%
1–2,000	11%	3%	5%	5%
2,001–5,000	20%	7%	5%	0%
5,001-10,000	13%	3%	11%	0%
10,001–15,000	15%	3%	0%	10%
15,001–20,000	9%	3%	0%	5%
20,001–50,000	11%	26%	11%	10%
50,001–100,000	2%	16%	26%	20%
100,001-500,000	9%	16%	16%	25%
500,001–1 Million	0%	10%	16%	10%
More than 1 Million	11%	13%	5%	10%

■ Firm Employment

Regarding employment, survey respondents were almost evenly distributed among five categories of staff size below. Firms with 100 or fewer full-time permanent employees represented nearly three-fourths of all respondents. The majority of businesses, a total of 67% that responded to the survey, reported having 20 or fewer part-time employees on staff. See Exhibit 5 and Exhibit 6 below.

Exhibit 5 – Number of full-time employees

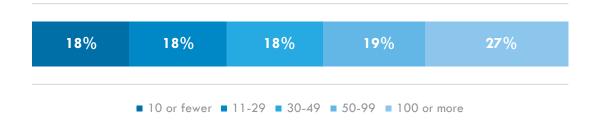
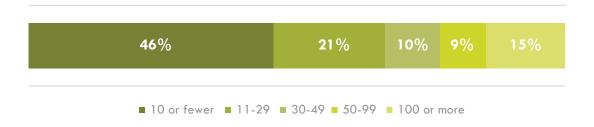
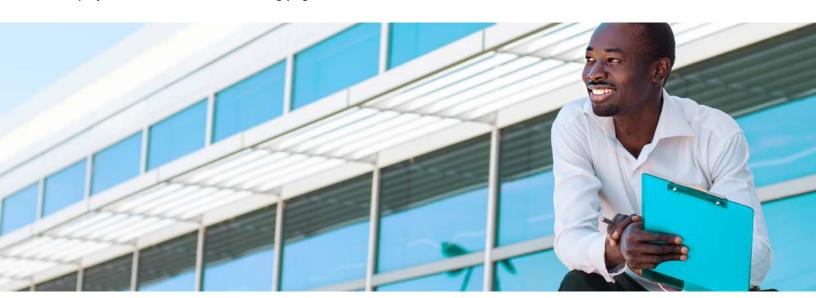


Exhibit 6 - Number of part-time employees



Respondents were asked if they anticipated more, fewer, or the same number of permanent employees in the next 12 months. Most employers (67%) indicated they will have the same number of employees, while 30% will have more employees, and 3% will have fewer employees.

Employers who indicated they will have more employees reported how many more employees they anticipate they will employ. See Exhibit 7 on the following page.



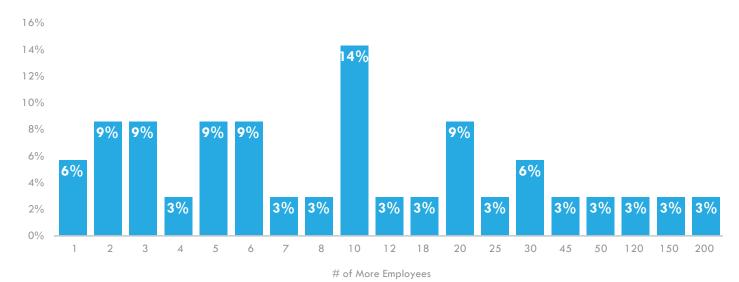


Exhibit 7 – Number of employees expected to be added in the next 12 months

Respondents who indicated they would have fewer employees on staff 12 months from now will lose only a few positions. Half of employers will reduce staff size by five workers; 25% will have one fewer employee, and another 25% will have two fewer staff members.

Due to the complexity of the industry, there are several distinct job titles that employers assign their facilities managers positions based on the size of their company, the industry, type of business operations, goals, and various job duties. Based on a search of job posting websites the most common job titles reported were:

- General Manager
- Assistant Manager
- 3. Restaurant General Manager
- 4. Operations Manager
- 5. Maintenance Manager

Survey responses also revealed the variety of job titles they utilized for their facilities manager positions. Many job titles contained the words "manager" or "director," while others were specific to the work done by the industry. For example, within the education sector, the person responsible for managing a facilities might be a School Site Safety Coordinator or School Facilities Manager. See Appendix A for the complete list of job titles collected by the study.

In addition to asking about overall staff size, respondents were asked how many facilities managers they employed as both part- and full-time employees at their location or locations (Exhibit 8). Responses indicate that employers generally do not hire facilities managers as part-time employees, and 86% of respondents employ one to nine full-time facilities managers, whereas 69% employ between one and three, and 17% employ four to nine.

¹ Burning Glass, full year 2015

Exhibit 8 – Part- and full-time facilities manager positions

Percent of Facility Managers Employed Full-Time or Part-Time (n=116)				
	0	1–3	4–9	10+
Part-Time	88%	9%	3%	1%
Full-Time	3%	69%	1 <i>7</i> %	11%

The projected demand for facilities managers in two years is relatively low; 87% of respondents will staff the same number of facilities managers, 11% will require more, and 2% will have fewer.

Of the respondents who said they will have more facilities managers **two years** from now, 46% will employ one more, and 15% reported they expect to add three to four more positions (Exhibit 9).

Exhibit 9 – Distribution of respondents by number of facility managers they expect to hire in the next two years

# of added facilities managers	% of respondents
1	46%
3	15%
4	15%
8	8%
12	8%
20	8%



Respondents were asked to estimate the number of facilities managers they anticipate will retire in two years and five years. The outlook for facilities manager retirements two years from now indicate nearly no retirees (Exhibit 10). In five years, 19% of employers (22 total) expect to have one facilities manager retire, and six employers anticipate two will retire.

Exhibit 10 - Number of retirees expected in two years and five years

% of Retirees in Two and Five Years (n=115)						
	0	1	2	3	4	5+
2 Years	85%	8%	3%	1%	1%	2%
5 Years	69%	19%	5%	3%	0%	4%

Current and Future Employment

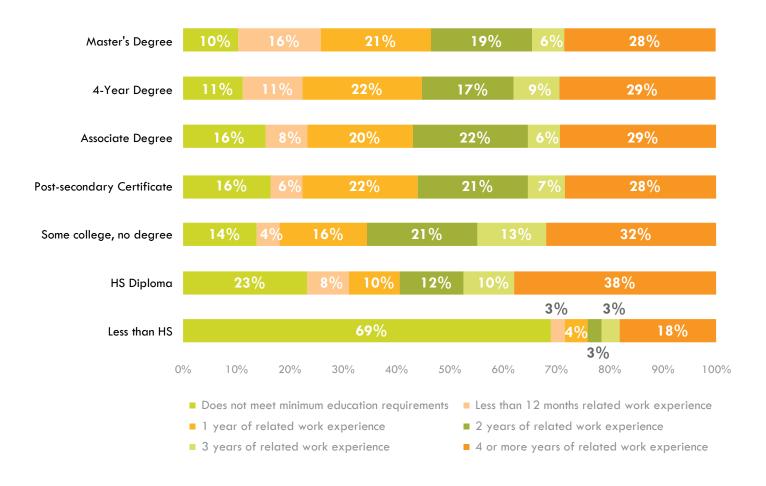
Based on data extrapolated from the self-reported employer survey results, the four-county region currently employs about 23,900 facilities managers—22,100 of these employees work full-time. The remaining 1,800 facilities managers are part-time employees.² In the next 12 months, employers expect to add 3,200 facilities managers to their payrolls, a 14% growth rate for this occupation.

In addition to job growth in this occupation, employers are expecting 1,600 of their facilities managers to retire in the next two years. In five years' time, 3,100 facilities managers are expected to leave their job for retirement. Employers will have a need to replace these retirees with well qualified candidates that have the right skill set to keep their operations in motion.

Education and Experience

It is important to understand the level of education attainment and work experience that make a candidate qualified to be a facilities manager. Exhibit 11 shows employer work experience preferences for various levels of education attainment. Overall, employers reported almost no preference as to whether a candidate possesses some post-secondary education, an associate degree or a bachelor's degree. Some post-secondary education combined with one to two years of work experience appears to be the preferred combination of qualifications for employers.

Exhibit 11 – Work experience and education attainment for facilities manager positions



² Extrapolation mythology in Appendix C

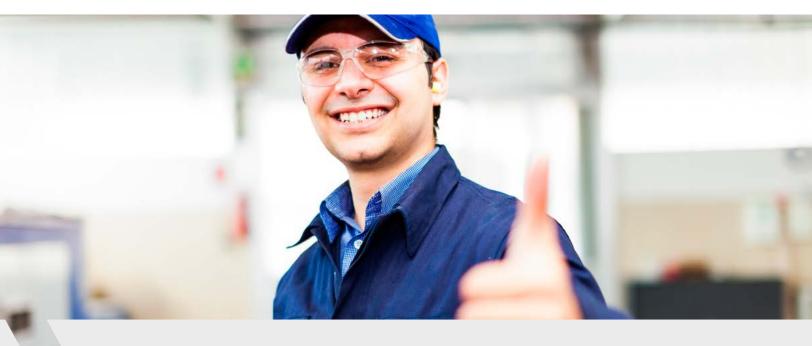
■ Skills, Certifications, and Technologies

Employers were presented a comprehensive list of certifications and credentials related to the position of facilities manager. They were then asked to select the certifications and credentials that they would prefer a qualified candidate possess. The top five certifications selected are:

- Certified Facility Manager (CFM) 45% of respondents
- Facilities Management Certificate (FMC) 30% of respondents
- Facilities Management Professionals (FMP) 20% of respondents
- Facilities Manager Administrator (FMA) 20% of respondents
- Certified Educational Facilities Professional (CEFP) 13% of respondents

Internet job posting results revealed that the most requested industry certification for employers seeking facilities manager candidates was Leadership in Energy and Environmental Design (LEED), found in 96% of job postings related to facilities manager jobs. The next most requested certificate was a Certified in Health Privacy and Security (8% of job postings) followed by Professional Engineer (7% of job postings) and Certified Construction Manager (6% of job postings).

Respondents were asked to rate in-demand skills as they pertain to a qualified facilities manager. The skills were rated as either "must have," "nice to have," or "not required" (Exhibit 12). Skills that were selected as "must have" were mathematical skills (76% of respondents), ability to create solutions for better efficiency (68%), and technical problem solving (67%). The skills least required by employers are Building Automation Systems (BAS) design knowledge and experience, and understanding of direct digital controls.

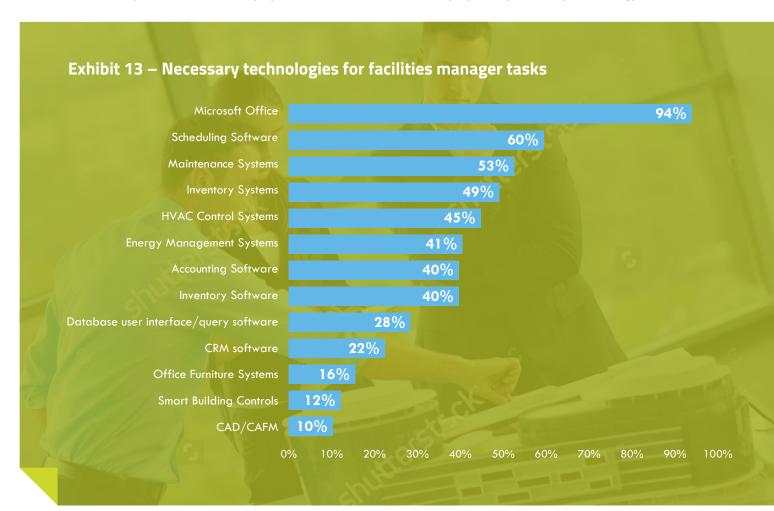


...the most requested industry certification for employers seeking facilities manager candidates was Leadership in Energy and Environmental Design (LEED)

Exhibit 12 - Skills in demand for facilities manager positions

	Nice to have but not required,		
	Must have	we can train	Not required
Mathematical skills	76%	22%	3%
Ability to create solutions for better efficiency	68%	28%	3%
Technical Problem Solving	67%	28%	4%
Working knowledge of OSHA standards and practices	59%	33%	9%
Ability to collect data from multiple systems for analysis	49%	37%	14%
Ability to read blueprints and schematics	40%	30%	30%
Understanding of energy efficiency and consumption	37%	47%	16%
Knowledge of management software systems	35%	56%	10%
Knowledge of electronics principles	34%	46%	21%
Understanding of Direct Digital Controls (DDC)	12%	38%	50%
Building Automation System (BAS) design knowledge and experience	11%	37%	52%

According to employer responses, there are numerous software and systems technologies necessary for completing facilities manager related job tasks. The most-valued technologies include Microsoft Office, scheduling software, and maintenance systems and inventory systems. See Exhibit 13 for employer responses by technology.



■ Employer Challenges

To determine where employers generally find qualified workers to fill facilities manager positions, survey respondents were asked to identify all sources of recruitment. Training workers from within the organization is the most preferred option for filling facilities manager vacancies, followed by online job advertisements. The following list shows primary sources of recruitment in descending order:

Train from within	71% (n=82)
Post online job advertisement	64% (n=74)
Referrals	42% (n=49)
Industry association	25% (n=29)
Other	3% (n=3)

Employers who indicated they fill facilities manager vacancies from within (n=82) were asked from which category of employee within the organization they recruit candidates (Exhibit 14). Three out of four of employers reported that office and administrative positions are most frequently utilized for recruiting facilities manager candidates. Employers experience little difficulty finding qualified facilities manager candidates within their organization, with 38% reporting no difficulty.

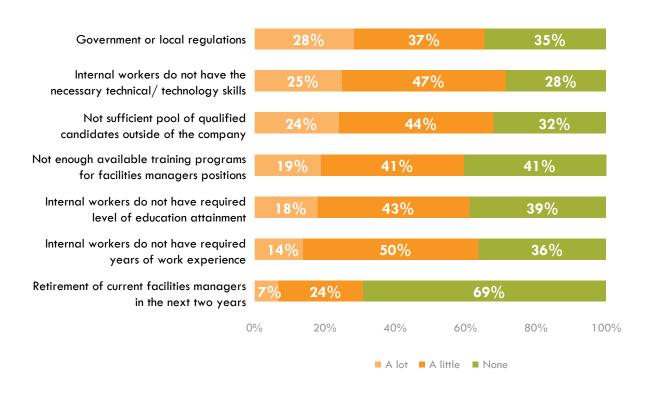
Exhibit 14 - Category of employee for facilities manager recruitment





The survey also addressed any internal or external factors perceived by employers that affect the facilities manager workforce (Exhibit 15). External factors, such as government or local regulations and an insufficient pool of qualified candidates outside the company, present some difficulty to employers, as does the scarcity of internal workers who possess the necessary technical skills for facilities manager positions.

Exhibit 15 - Factors affecting the facilities manager workforce



Community College Training Opportunities

In addition to collecting employer feedback on facilities manager-related certifications, skills, and technologies, the survey allowed respondents to provide general suggestions on training that a community college could offer. Training topics that employers reported would be beneficial for facilities manager roles include:

Facility Management Classes / Degrees / Certifications

- Basic Job Training & Systems
- Applicable Laws, Contract Management & City-specific Regulations
- Fundamentals of Construction, Mechanical and Building Systems, including plumbing, electrical, energy management & HVAC
- Internships and Hands-On Training, including real-life situations with multiple variables
- Certification and degrees in related fields such as health care management, hospitality, etc.

Basic Skills

- Interpersonal & Communication Skills
- Problem Solving & Critical Thinking
- English & Math Skills
- Time Management
- Professional Communication, including email formatting & telephone courtesy

Management & Workplace Skills

- Workforce Management, Leadership & Teamwork
- Deal Making
- Job Scheduling
- Customer Service
- Accounting, Budgeting, Data & Finance Analysis
- Inventory & Sales
- Employee Culture & Associate Relations

Computer Skills

- Computer Applications (Google, Google Apps for Education, MiniTab)
- Troubleshooting Technology Issues and Social Medial (i.e. responding on Yelp)
- Microsoft Office
- CRM Software & Management-specific Computer Programs

Conclusion and Recommendations

This study focused on the demand for facilities managers in a four-county area—Los Angeles, Orange, Riverside and San Bernardino. Regionally, this occupation appears to have a promising outlook. There are nearly 24,000 facilities managers employed in the four counties, and employers expect to hire an additional 3,200 facility managers over the next 12 months, a growth rate of 14%.

Moreover, employers anticipate 1,600 facility managers will retire in the next two years. Over the next five years, 3,100 facility managers are projected to retire. These job openings will need to be filled by qualified workers with the right skill set.

This poses a unique opportunity for community colleges to fill the training gap present in the region, particularly because employers prefer that qualified candidates possess some postsecondary education combined with one to two years of work experience. Employers also report an insufficient pool of qualified external candidates and a scarcity of internal workers who possess the necessary technical skills for facility manager positions.

Based on responses from employers, it seems the skills gap for facilities managers is similar to that seen for many middle-skill jobs (those requiring less than a bachelor's degree) in the United States. For example, employers in the four-county region reported a need for training programs that address basic skills: effective communication, problem solving and critical thinking, English and math skills, and time management.

There are additional areas of need related to education and training programs in the region that employers would like to see addressed. For example, they would like to see education programs that offer information on city-specific regulations that apply to facilities, as well as fundamental principles behind construction, mechanical

and building systems.

Additionally, there seems to be a hiring trend related to energy efficiency since workers with HVAC knowledge and LEED certification are more highly in demand.

Many community colleges already offer HVAC programs

and may want to revise or adapt programs to integrate elements of LEED certification.

As with many other technical fields, work experience through internships and hands-on training are highly valued by employers. Contextualized learning has been gaining steam in recent years, and programs that are geared toward preparing students to become facilities managers would do well to include real-life scenarios with multiple variables into the curriculum, if they do not do so already.

Further recommendations:

- Community colleges may want to consider expanding or developing certification programs that complement employer hiring preferences.
 Top credentials among employers include: Leadership in Energy and Environmental Design (LEED), Certified Facility Manager (CFM) and Facilities Management Certificate (FMC).
- Colleges may want to incorporate the following skills into education programs geared toward facilities managers: mathematical skills, ability to create solutions for better efficiency, technical problem solving, OSHA standards and policies as well as data collection and analysis.
- Education programs should include training in a variety of software and technological systems that are highly valued by employers: Microsoft Office, scheduling software, maintenance systems, inventory systems and HVAC controls. Also of importance are energy management systems and accounting software.
- Because the majority of employers report recruiting current employees from office and administrative positions to fill facilities manager vacancies, instructors at community colleges may want to expose students to this potential career pathway either in class through guest speakers or through field trips.

■ Appendix A – Employer-Reported Job Titles Used for Facilities Managers Positions

Accountant	Director of Support Services	Market Center
Account	Director or dopport dervices	Administrator
Administrative Assistant	Director of Technology	Marketer
Administrator	Director of Transportation	Marketing Manager
Assistant Director of Facilities Services	Dispatch Manager	Office Administrator
Assistant Manager	Energy Management Specialist	Office Manager
Assistant Principal	Energy Managers	Operations Manager
Associate Director of Facilities Services	Executive Director	Park Supervisor
Branch Manager	Facilities Coordinator	Plant Manager
Branch On-Boarding and Facilities Support	Facilities Manager	Practice Manager
Building Engineer	Facilities Technician	Principal
Business Manager	Floor Manager	Production Manager
Campus Coordinator	Food & Beverage Director	Productivity Coach
Campus Director	Front Desk Manager	Program Facilitator
Campus Manager	General Manager	Program Specialists
Chief Engineer	Health Care Administrator	Radiology Manager
Custodial Supervisor	Hospitality Manager	Resident Manager
Custodian	Housekeeping Manager	Restaurant Manager
Data Systems Administrators	HR Manager	Room Manager
Director	Instructional Technician	Safety/Risk Management
Director of Activities	IT Director	School Site Safety Coordinator
Director of Community Relations	IT Manager	Shift Manager
Director of Engineering	Kitchen Manager	Site Maintenance Manager
Director of Facilities	Lead Engineer	Senior Superintendent
Director of Maintenance	Leads Manager	Store Manager
Director of Operations	Maintenance & Grounds Supervisor	Superintendent
Director of Plant Services	Maintenance Manager	Supervising Technician
Director of Resident Services	Maintenance Worker	Warehouse Manager
Director of Security		

Appendix B – Employer-Valued Certificates Credentials

Certification	% of respondents
Certified Facility Manager	45%
Facilities Management Certificate	30%
Facilities Management Professionals	20%
Facilities Manager Administrator	20%
Certified Educational Facilities Professional	13%
Building Systems Maintenance Certificate	11%
Certified Property Manager	11%
Building Energy Certificate	10%
Sustainability Facility Professionals	8%
LEED	8%
Certified Health Care Facility Manager	7%
Building Operator Certification	5%
Certified Energy Manager	5%
Certified in Supply Management	5%
High Performance Building Design Professional	3%
APICS Certified Supply Chain Professional	3%
Real Property Administrator	3%
Certified Building Services Executive/Building Services Contractors Association International	2%
Other	35%

Appendix C –Extrapolation Methodology

In order to project future employment one year out, various calculations were used to extrapolate employment estimates. First, the data was screened and filtered for outliers (extreme values): the total number of facility managers. Any values that returned a standardized score (z-score) of 2 or above was removed in order to calculate a more conservative estimate. Adjusted means were calculated using the filtered data. To get the extrapolated numbers, the adjusted means were multiplied by an "N" that represented the estimated number of businesses within the universe. To obtain the "N", survey incidence rates were applied to the larger universe across seven industry sectors; 27,465 businesses. We then multiplied our adjusted means by (N). These data are reported with a 90% level of confidence and with a 10% margin of error.

More About the Centers of Excellence

The Centers of Excellence (COE), in partnership with business and industry, deliver regional workforce research customized for community college decision making and resource development. This information has proven valuable to colleges in beginning, revising, or updating economic development and Career Technical Education (CTE) programs, strengthening grant applications, assisting in the accreditation process, and in supporting strategic planning efforts.

The Centers of Excellence Initiative is funded in part by the Chancellor's Office, California Community Colleges, Economic and Workforce Development Program. The Centers aspire to be the premier source of regional economic and workforce information and insight for California's community colleges. More information about the Centers of Excellence is available at www.coeccc.net.

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